

# Notice of Allowability

Application N .

09/727,646

Examiner

Samuel Broda

Applicant(s)

AGRAWALA ET AL.

Art Unit

2123

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' Amendment mailed on.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☒ The drawings filed on 30 November 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 11/30/00, 7/25/01
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.



**SAMUEL BRODA, ESQ.  
PRIMARY EXAMINER**

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### DETAILED ACTION

1. Claims 1-15, presented in an Amendment mailed on 28 September 2004 and in response to a restriction requirement discussed below, have been examined.

#### *Election/Restriction*

2.1 In the Amendment at page 6 paragraph 1, Applicants note that the prior ten-way restriction requirement did not place claim 108 in any grouping; Applicants suggested that claim 108 be placed within Group V.

Applicants are correct that in the prior restriction requirement, claim 108 should have been identified as belonging to Group V.

2.2 In the Amendment at page 6 paragraph 1, Applicants . . . elect the claims in Group VI, specifically claims 1-15 for prosecution in the present application. To this end, claims 16-111 are canceled above without prejudice but are retained in the application file pending the filing of appropriate divisional applications to prosecute the non-elected claims.

Because Applicants have not included in the Amendment any reasons for the disagreement with the restriction requirement, Applicant's response is considered an election without traverse. See 37 CFR 1.143 and MPEP §§ 818.03-818.03(a).

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***Reasons for Allowance***

3. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The closest prior art of record shows:

(1) a map display apparatus for displaying map information using a bird's-eye perspective (Endo et al, U. S. Patent 6,278,383);

(2) a set of guidelines for forming grids in a virtual environments in which the main axes of the landmarks are aligned with the path/edge grid's main axes (Vinson, "Design Guidelines for Landmarks to Support Navigation in Virtual Environments," ACM Conference on Human Factors in Computing Systems, pp. 278-285 (May 1999)); see especially pages 283-284;

(3) a travel reservation information system that outputs maps at differing scales (DeLorme et al, U.S. Patent 5,948,040);

(4) a display of maps using variable scale factors (Sarkar et al, "Graphical Fisheye Views"); and

(5) a display screen that can be divided into a plurality of windows for simultaneously displaying different classifications of routes in the same scale (Hayashida et al, U. S. Patent 6,067,502).

3.1 Applicants' set of claims consists of claims 1-15.

Independent claim 1 is directed to a method for optimizing a display of a route map; independent claim 4 is directed to the corresponding computer program product; independent

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claim 7 is directed to the corresponding computer system. Each independent claim identifies the combination of distinct steps of: “fitting a collection of reference points in said route map, with a probability distribution function, each said reference point corresponding to a position of an intersection in said route map,” “computing a bounding box, wherein a size and orientation of said bounding box is determined by said mean position, said first farthest position and said second farthest position,” and “determining a direction of the long axis of said bounding box.”

Because the closest prior art does not appear to teach or suggest using a probability function fitted to intersection points in a route map to compute a bounding box and its long axis, claims 1-15 are deemed allowable.

4. Any comments considered necessary by Applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Broda, whose telephone number is (571) 272-3709. The Examiner can normally be reached on Mondays through Fridays from 8:00 AM – 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner’s supervisor, Kevin Teska, can be reached at (571) 272-3716. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (571) 272-2100.

A handwritten signature in black ink, appearing to read 'S Broda'.

**SAMUEL BRODA, ESQ.  
PRIMARY EXAMINER**